

**CLAIMS**

- 5 *Sub p1* 1) A method of regenerating a filter of a diesel exhaust particulate filter system, said method comprising as steps :
- a) providing a porous membrane ;
  - b) using said membrane as filter during a filtration period ;
  - c) using said membrane as a surface combustion burner membrane during a regeneration period following said filtration period.
- 10 2) A method of regenerating a diesel exhaust particulate filter system
- a) providing at least two porous membranes ;
  - b) using at least one of said membranes as filter during a filtration period ;
  - 15 c) using at least one of the remaining membranes as a surface combustion burner membrane during a regeneration period which overlaps with said filtration period.
- 20 *Sub p2* 3) A method according to claim 1 or 2, wherein said membrane is a stainless steel fiber web.
- 4) A method according to any of the preceding claims, said method comprising the step of providing fuel to said membrane during the regeneration period.
- 25 *Sub p3* 5) A method according to claim 4 wherein said fluid fuel is diesel.
- 30 *Sub p4* 6) A method according to any of the preceding claims, said method further comprising the step of :
- monitoring the pressure across said membrane during the filtration period.

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7. A method according to claim 6, said method further comprising the step of :

- generating a control signal to regenerate said membrane, once the pressure across said membrane exceeds a predetermined level.

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8. A method according to claim 4 wherein during said regeneration period the amount of fuel provided is reduced after initiation of a flame at said porous membranes.

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